

WETLANDS PROTECTION BYLAW  
REGULATIONS

**ARTICLE I**  
**General Provisions**

**§147-1 Statutory Authority**

These regulations are promulgated under the authority of the Home Rule Amendment Article LXXXIX(89), of the amendments of the Constitution of Massachusetts, 1966, and in accordance with the 2006 Wetlands Protection Bylaw, Chapter 119 of the Code of the Town of Harvard as amended and shall be effective upon the fulfillment of all legal requirements for their effectiveness.

**§147-2 Purpose**

- A. These regulations are promulgated to create a uniform process and to clarify and define the provisions of the 2006 Wetlands Protection Bylaw as amended, hereafter called the "Bylaw", administered by the Harvard Conservation Commission, hereafter called the "Commission".

Because the Massachusetts Wetlands Protection Act was designed to be used throughout the Commonwealth and because, by necessity, Acts by the State Legislature often must balance conflicting interests, the special needs and circumstances of specific municipalities may not be adequately addressed.

This additional protection is important to Harvard for several reasons:

- (1) Almost all Harvard residents are served by private wells and septic systems. Of the more than 1800 housing units in Harvard, only 97 have hook-ups to public wells. Unlike cities/towns with a few municipal wells which have protection zones around them, **each one of our private wells must be protected.**
- (2) Bare Hill Pond, designated a "Great Pond" by the State, offers boat access to the general public and swimming off a town beach for residents, and is an important natural and recreational asset to the town and the Commonwealth. Due to the location of a town well adjacent to the pond, the pond is protected by State Zone 2 Aquifer Regulations protecting public water supplies.
- (3) As the home of headwaters to streams that carry water through a good portion of northeastern Massachusetts, Harvard is blessed with relatively high quality surface water and a responsibility to protect these headwaters. Water in Harvard flows into three large watersheds that ultimately drain to the Atlantic at Newburyport via the Nashua, Concord, and Merrimack Rivers.
- (4) Bowers Brook, Harvard's major perennial stream, flows across the length of Harvard from south to north. Extensive wetlands of red maple swamp and hummocked shrub swamp extend around many portions of the watercourse and serve to regulate the stream's flow, cleanse the water, and provide habitat for diverse wildlife. The area from Bolton Flats in Bolton to Mirror Lake within Harvard's historic boundaries of the former Fort Devens is designated a MA BioMap2 Core Habitat and is a State-designated Priority Habitat Area.

- (5) Riparian habitat bordered by scrub-shrub and emergent wetlands is found along the Nashua River in Bolton Flats and the Oxbow National Wildlife Refuge and along Bowers Brook and Bennets Brook.
- (6) In the southeast quadrant of Harvard flood control dams protecting the Assabet River have created a 103 acre pond complex and equivalent acreage of freshwater marsh. This entire Delaney Wildlife Management Area is designated a MA NHESP 2017 Priority Habitat of State listed Rare Species and Estimated Habitat of Rare Wildlife.
- (7) There are numerous vernal pools within the boundaries of Harvard which are critical wildlife breeding habitat. These ephemeral pools, which can range in size from large puddles to multi-acre ponds, are of special value because their unique characteristics provide essential breeding habitat to a number of invertebrate and amphibian species that can live nowhere else. A host of additional wildlife species also use these pools and adjacent uplands and many species of amphibians live their lives within range of their natal pool, migrating back to the pool only for a few days each year for breeding purposes.

B. The Bylaw sets forth a public review and decision-making process to protect wetlands and adjoining land areas by controlling activities deemed likely to have a significant (or cumulative) impact on wetland values, including, but not limited to the following:

- (1) Protection of public and private water supplies
- (2) Protection of groundwater
- (3) Flood control
- (4) Erosion control
- (5) Storm damage control and prevention
- (6) Prevention of pollution
- (7) Protection of land containing wildlife (wildlife habitat)
- (8) Recreation
- (9) Protection of aesthetics

to be referred to collectively as “the interests” of the Bylaw and the “resource area values”.

### **§147-3 Waivers from Rules and Regulations**

Strict compliance with these rules may be waived, modified, or altered when, in the judgment of the Commission, such action is in the public interest and is consistent with the intent and purpose of the Bylaw. The burden of establishing the basis for a waiver, modification or alteration is on the petitioner to establish by a clear preponderance of the evidence. Any request for a waiver, modification, or alteration must be submitted to the Commission in writing on Form C. The Commission shall act on the request within 30 days of the date of receipt and will provide the applicant either by certified mail or hand delivery, its written decision.

## ARTICLE II Definitions

### §147-4 Terms Defined

The following definitions and those defined within Chapter 119 Wetland Protection Bylaw of the Code of the Town of Harvard shall apply in the interpretation of these regulations and the associated Bylaw.

A. As used in this Chapter, the following terms shall have the meanings indicated:

*Adjoining land area*, also referred to as the *Buffer Zone* - That area of land extending 100 feet horizontally outward from the boundary of any area defined as “Freshwater Wetlands”..” This term shall also include that area of land extending 200 feet horizontally outward from the boundary of any vernal pool, river, pond, or lake.

*Alter* - Shall include without limitation, the following actions when undertaken in areas subject to this Bylaw:

- (1) removal, excavation, or dredging of soil, sand, gravel, or aggregate material of any kind;
- (2) changing of pre-existing drainage characteristics, flushing characteristics, salinity, distribution, sedimentation patterns, flow patterns, or flooding characteristics;
- (3) drainage or other disturbance of water level or water table;
- (4) dumping, discharging, or filling with any material which may degrade water quality;
- (5) placing of fill or removal of material which could alter elevation;
- (6) driving of piles, erection of buildings or structures of any kind;
- (7) placing of obstructions or objects in water;
- (8) destruction or dislocation of plant life, including cutting and trimming of trees and shrubs (excluding vista pruning as defined in 310 C.M.R, 10.04) except as needed for safety, and the introduction of invasive species.
- (9) changing water temperature, biochemical oxygen demand, or other physical, biological, or chemical characteristics of any waters or wetland.
- (10) any activities, changes, or work which may cause or tend to contribute to pollution of any body of water or ground water.
- (11) incremental activities that have, or may have, a cumulative adverse impact on the resource area protected by the Bylaw.

*Applicant* – The person or entity requesting a Determination of Applicability or a Wetland Permit. The term Applicant and the term Petitioner shall be interchangeable for purposes of these regulations.

*Bog* - as defined in M.G.L. Chapter 131 §40 paragraph 5 shall apply for this regulation.

*Freshwater Wetlands* - wet meadows; swamps; bogs; marshes; vernal pools; banks; reservoirs; lakes; ponds of any size; rivers; streams; creeks; beaches; dunes; land subject to flooding; land under water bodies; areas where ground water, flowing or standing surface water or ice provide a significant part of the supporting substrate for a plant community for at least five months of the year. For the purpose of this Bylaw, fresh water wetlands shall also include non-bordering vegetated wetlands.

*Inundation by ground water* - The presence of ground water at or near the surface of the ground at least six months of the year.

*Isolated Land Subject to Flooding* - The definitions given in 310 CMR 10.57(2)(b) shall apply to this regulation except that the minimum volume of 1/4 acre-feet does not apply when the area is known to be part of the ground water system.

*Resource Area* – Freshwater Wetlands plus all adjoining land area or “buffer zone”

*Water pollution* - the changing of water temperature, biochemical oxygen demand (BOD), and/or other physical, biological, or chemical characteristics of the water.

- B. The definitions given in 310 CMR 10.04 for the following shall apply to this regulation: dredge, fill, flood control, freshwater wetlands, lake, land subject to flooding (except for isolated land subject to flooding), marsh, meadow, pond (except that the size threshold of 10,000 square feet shall not apply), private water supply, public water supply, river, and stream.

### **ARTICLE III Applications**

#### **§147-5 General**

- A. Any person who desires a determination as to whether these regulations apply to an area, or work to be performed in an area, shall file with the Commission a Massachusetts WPA Form 1 Request for Determination of Applicability as detailed in §147-6 as required under M.G.L. Chapter 131 §40.
- B. Any person who desires an Order shall file with the Commission the appropriate forms as detailed in §147-6 as required under M.G.L. Chapter 131 § 40.

#### **§147-6 Filing Procedure**

- A. Two (2) original copies of Massachusetts WPA Form 1 Request for Determination of Applicability (RDA), WPA Form 3 Notice of Intent (NOI) or WPA Form 4 Abbreviated Notice of Intent, or WPA Form 4A Abbreviated Notice of a Resource Area Delineation (ANRAD) with accompanying plans and pertinent data as detailed in Article IV Plans.
- B. Two (2) original copies of Harvard Forms A,B,C (if necessary), D, E and F.
- C. The State mandated filing fee, if applicable, plus additional Harvard filing fees (Form F), and a check payable to the Registry of Deeds for the appropriate sum to record the Order shall be presented with the application.
- D. The Petitioner shall provide eight (8) copies of the narrative and the accompanying plans, one (1) for each of the Commission members.

- E. All copies shall be double sided when possible.
- F. The Petitioner shall provide signed Form D granting the Harvard Conservation Commission or its consultants access to the project site under consideration for permit at any time from receipt of Application through the issuance of a Certificate of Compliance.
- G. The submission must be made by Certified Mail addressed to 13 Ayer Road, Harvard, MA 01451, or delivered by hand to the Commission's Agent. The application date will be recorded as the date when the Agent receives the application.
- H. Applications must be received by 12:00 pm. on the Thursday, two weeks prior to the Thursday meeting of the Commission at which the application will be heard.
- I. Two (2) complete copies shall be submitted to the Department of Environmental Protection, 8 New Bond Street, Worcester, MA 01606. The submission must be made by Certified Mail or delivered by hand with proof of delivery.

#### **§147-7 Notice to abutters**

- A. The petitioner shall provide a certified list of abutters within 300 feet of the project location to whom notification of intent to file has been sent.
- B. The Notice to abutters shall be on Form B. The petitioner(s) shall provide copies of the signed receipts from abutters or certificate of mailing, as proof of notification no later than the date of the public hearing.

#### **§147-8 Notice to Town Boards**

The Petitioner shall, if permits from other Town boards are required for the project, file simultaneously with those boards (unless such applications were filed prior to filing with the Commission). Any information or plans communicated to those boards shall also be sent to the Commission by the Petitioner. The Commission may also require the petitioner to submit complete copies of the application and all of its accompanying data to the Fire Department or the Bare Hill Watershed Management Committee. Should the petitioner fail to submit copies to any board, department or committee required by the Commission, the application may be treated as an incomplete application under §147-11 below.

#### **§147-9 Notification of Watercourse Alteration**

In a Riverine situation, in addition to the requirements of §147-6, the Conservation Commission shall notify the following of any proposed alteration or relocation of a watercourse:

- Adjacent Communities
- NFIP State Coordinator  
Massachusetts Department of Conservation and Recreation  
251 Causeway Street, Suite 600-700  
Boston, MA 02114-2104
- NFIP Program Specialist  
Federal Emergency Management Agency, Region I  
99 High Street, 6th Floor  
Boston, MA 02110

## **§147-10 Consultant Review Fees**

- A. If, after receiving an Application, the Commission determines that in order to review that Application or Request it requires technical advice unavailable from municipal employees, it may employ outside consultants pursuant to M.G.L. c. 44, §53G. The Commission may, by majority vote, require that the applicant pay a reasonable fee for the employment of outside consultants. Whenever possible, it shall work cooperatively with the Applicant to identify appropriate consultants. The outside consultant may be employed to review the application or request, to make recommendations to the Commission regarding any changes s/he would suggest to better effectuate the interests of the Bylaw.
- B. A review fee may be imposed only if:
- (1) the work of the consultant consists of review of studies and/or plans prepared on behalf of the applicant or independent studies on behalf of the Commission, recommended changes to any such study, and/or recommendations as to any changes to the plans;
  - (2) the work is in connection with the applicant's specific project, and
  - (3) all written results and reports are made part of the record before the Commission.
- C. A review fee may be imposed only after the Commission has complied with the applicable provisions of the Uniform Procurement Act, M.G.L. c. 30B, §§ 1-19, except for professional services which are exempt from the competitive procurement requirements of said M.G.L. c. 30B.
- D. All fees assessed pursuant to this Paragraph shall be reasonable considering:
- (1) the complexity of the proposed project as a whole;
  - (2) the complexity of particular technical issues;
  - (3) the area or resource areas subject to protection to be affected;
  - (4) the size and character of the site;
  - (5) the projected construction costs, and
  - (6) fees charged by similar consultants in the area.
- E. Any invitation for bids or request for proposals shall indicate that award of the contract is contingent upon payment of a consultant review fee by the Applicant. If the Applicant fails to pay the review fee within ten (10) days of receiving written notification of selection of a bidder or offeror, the Commission may deny the Application or Request.
- F. Prior to paying the consultant review fee, the Applicant may appeal the selection of the consultant to the Select Board.
- (1) The grounds for such an appeal shall be limited to claims that the consultant selected has a conflict of interest or does not possess the minimum, required qualifications.
  - (2) The minimum qualifications shall consist either of an educational degree in or related to the field at issue or three (3) or more years of practice in the field at issue or a related field.
  - (3) The required time limits for action upon the Application or Request by the Commission shall be extended by the duration of the appeal. In the event that no decision is made by the Select Board within thirty (30) days following the filing of the appeal, the selection made by the Commission shall stand.
- G. Each consultant review fee shall be deposited in a special account established by the Town Treasurer pursuant to M.G.L. c. 44, §53G:

(1) Funds from the special account may be expended only for the purposes described in §147-10B, above, and in compliance with the Uniform Procurement Act, M.G.L. c. 30B, §§ 1-19, if applicable.

(2) Within thirty (30) days of the issuance of the Certificate of Compliance or of such time as the Applicant formally withdraws the proposal, the Applicant shall receive a final report of funds in the special account and shall be paid any unspent excess in the account, including accrued interest.

(3) The Town Accountant shall submit annually a report of the special account to the Select Board and the Town Administrator for their review. This report shall be published in the Annual Town Report.

### **§147-11 Incomplete Application**

An application must include, at a minimum, on a properly executed WPA Form, the items required under §147-6, properly executed Harvard Forms A, B, C (if necessary), D, E and F, and a certified list of abutters and the necessary information detailed under Article IV. If the Commission determines that an application is incomplete or improper it shall notify the Applicant within twenty-one (21) days of the date of receipt. The Commission may, at its discretion:

- A. Return the entire application, in which case all the required time periods for processing the application will become invalid.
- B. Require that additional information or materials be submitted within a specified period of time, which shall be no later than the date of the scheduled public hearing.
- C. Continue the public hearing at the Applicant's expense, for a period to be determined by the Commission.

## **ARTICLE IV Plans**

### **§147-12 Setbacks**

These setbacks from the edge of wetlands are the minimum and may be extended further if deemed necessary for the protection of the interests of the Bylaw by the Commission. These setbacks may be waived, modified, or altered in extraordinary circumstances if the Petitioner establishes by a preponderance of the evidence that the project cannot be accomplished with any other design and there will be minimal adverse impact to the interests of the Bylaw.

Wetland dependent structures (drains, outfalls, weirs), fences, and structures necessary for upland access where reasonable alternative access unavailable

0 – foot setback

No disturb zone in which there shall be undisturbed natural vegetation, except for vernal pools shall be

50 – foot setback  
100- foot setback

Driveways, roadways, structures

75 – foot setback

Above or Underground storage of gasoline, oil other fuels and hazardous materials

100 – foot setback

Pasture and stables/barns for animals

100 -- foot setback

### **§147-13 Vegetation Removal**

- A. Natural vegetation in a resource area protected by the Bylaw is significant for the ecological integrity of wetlands, for wildlife and for ecosystem services including temperature and wind moderation, erosion control, flood control and water quality. Naturally occurring vegetation within 100 feet of a wetland shall not be altered without written approval of the Commission. Maintenance pruning of tree branches or shrubs or vista pruning as defined in the Massachusetts Wetlands Protection Act, 310 CMR 10.04 may be allowed with on-site consultation and permission of the Conservation Agent.
- B. Proposals for alteration, removal or replacement of vegetation must be clearly marked on a plan showing the resource area and include a clear description of activity proposed.

### **§147-14 Plan Requirements**

Plans shall adequately describe the proposed activity and its effect on wetlands and related water resources and adjoining land areas. Pre-project and post-project hydrology should remain fundamentally the same as it pertains to protecting wetlands functions and values. Of course, some minor degree of change in hydrology is inevitable in any engineering/construction project, and within reasonable limits, the Commission shall permit such variation when, in its judgment, such changes will not produce a significant impact on wetlands functions and values. The use of aboveground vegetated swales, infiltration methods, and other low-impact drainage designs will be given preference over subsurface drainage structures. The following items are set out as a minimum standard and are not intended to be a complete and final presentation as to what a plan would show. The Applicant may submit, or be required to submit to the Commission, any additional information which would assist in the review and which is deemed necessary to determine the proposed effect on the interests protected by the Harvard Wetlands Bylaw.

Any revised plans shall be submitted no later than 12 noon on the Thursday prior to the scheduled hearing, unless the hearing is scheduled on a day other than a Thursday in which case the plans shall be submitted at least one week prior to the hearing. All revised plans shall be sent to the Department of Environmental Protection regional office at the same time for additional review and comment.

All applications shall include:

#### **A. General Information Required**

The Applicant upon submission of the application may be required to provide the following:

- (1) All drawings shall be drawn with the title designating the name of the project, location and names of the person(s) preparing the drawings and the date prepared, including the latest revision date. The Commission may require that plans and calculations be prepared and stamped by a registered Professional Engineer (PE) or other registered professional when in its judgment, the complexity warrants this certification. Registered Professional Engineers shall indicate the engineering discipline in which they are certified. Plans depicting proposed drainage systems must be certified by a registered Professional Civil Engineer.
- (2) An 8 1/2" x 11" photocopy of the U.S.G.S. quadrangle sheet, showing the location of the proposed project.
- (3) An 8 1/2" x 11" section of the Tax Assessors map on which the site of the proposed activity is outlined in red.



## B. Site Plan

The applicant shall submit a site plan, at a scale of 1 inch equals-not more than 40 feet, showing the following items:

- (1) When excavation, fill, or other construction is proposed; existing and proposed contours (in contrasting symbols) shall be shown in feet above sea level or relative to a datum with intervals no greater than two feet. Date of ground survey shall be given.
- (2) Delineation of all wetlands, lands subject to flooding, water bodies, waterways, ditches, creeks, rivers, streams, and ponds, whether natural or man-made, continuously or intermittently flowing. The upland boundary of all bordering vegetated wetlands shall also be shown. The 100-year flood elevation shall be shown.
- (3) A delineation of the 100-foot and 200 foot (if required by §147-4 A.) buffer zones.
- (4) A delineation of all alterations proposed in or having an impact on wetlands.
- (5) Existing stone walls, buildings, rock ridges and outcroppings shall be shown.
- (6) Location, extent, and area of all existing and proposed structures, roadways, paved areas, septic systems, wells, tanks, and utility easements.
- (7) Proposed lowest elevation of cellars or floors.
- (8) Existing and proposed location, rim elevation, and invert elevation of all catch basins, drains, culverts, and other drainage structures immediately upstream and downstream of the site, as well as those on-site.
- (9) Details and locations for all temporary erosion controls proposed.
- (10) Proposed permanent pollution control devices on-site, such as: hooded catch basins, flow dissipaters, or vegetative buffers.
- (11) Cross-sections showing existing and proposed slope, elevations, bank, and bottom conditions of each watercourse to be altered. Locations of cross sections shall be specified.
- (12) Proposed location of any fill material which will be stored on site.
- (13) The "limit of work" line shall be shown.
- (14) All plans submitted to the Commission for review shall, when possible, be in color or highlighted with transparent marker pen as follows:
  - a. Blue: Wetland line
  - b. Green: 50 foot setback from wetland line
  - c. Yellow: 75 foot setback from wetland line
  - d. Pink: 100 foot (and 200 foot, if required) setback from wetland line
  - e. Orange: Siltation barrier

## C. Stormwater Management

A compliance evaluation is required to demonstrate how the proposed project meets the applicable stormwater management standards identified in this section of the regulations, when

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triggered. No Resource Area other than Buffer Zone, Riverfront Area, Bordering Land Subject to Flooding, or Isolated Land Subject to Flooding may be altered or filled for the impoundment, detention, or retention of stormwater and the applicable performance standards for these Resource Areas under these regulations shall apply to any such alteration or fill. Except as expressly provided in §147-14C(1) or (2) below, stormwater runoff from all industrial, commercial, institutional, office, residential, and transportation projects that are subject to regulation under the Bylaw including site preparation, construction, and redevelopment and all point source stormwater discharges from said projects within any Resource Area shall be provided with stormwater best management practices to attenuate peak rate and volume of runoff, attenuate pollutants, and to provide a set back from receiving waters and wetlands in accordance with the applicable standards below and the Massachusetts Stormwater Handbook. In project design, the applicant shall consider environmentally sensitive site design and low impact development techniques to manage stormwater;

(1) The stormwater management regulations set forth at 310 CMR 10.05(6)(k) to (q) shall apply to any project pursuant to said regulations where any work is proposed within any Bylaw Resource Area or where a stormwater discharge is proposed within any Resource Area, including the Buffer Zone. In addition to meeting the ten stormwater management standards at 310 CMR 10.05(6)(k), stormwater best management practices shall be provided to reduce by at least five (5) percentmatch or improve the peak runoff rates and volumes under proposed conditions compared to existing conditions for the 2- and 10-year frequency storm events, and peak runoff rates and volumes under proposed conditions compared to existing conditions shall not exceed existing peak runoff rates and volumes for the 50- and 100-year frequency storm events. Drainage calculations must include existing and proposed runoff rates and volumes for the 2-, 10-, 50-, and 100-year frequency storm events to all site design points with a narrative summary and summary table and be stamped and signed by a Registered Professional Engineer. Such calculations shall be conducted in accordance with standard recognized engineering practices using rainfall data from the “Extreme Precipitation in New York & New England” ([www.precip.net](http://www.precip.net)) developed by Northeast Climate Research Center at Cornell University or other methods approved by the Commission. The specific rainfall data to be used in such calculations under these Regulations are from Harvard Center and are 3.05 inches for the 2-year, 24-hour event, 4.54 inches for the 10-year, 24-hour event, 6.75 inches for the 50-year, 24-hour event 8.02 inches for the 100-year, 24-hour event.

(2) Projects that do not trigger the stormwater management regulations cited in §147-14C(1) above shall, at a minimum, meet the following stormwater management standards when the proposed project would result in greater than a five (5) percent increase in impervious surfaces on the site;

a. there shall be no new stormwater conveyances that discharge untreated stormwater directly to or cause erosion within Bylaw Resource Areas;

b. peak runoff rates and volumes under proposed conditions must be reduced by at least five (5) percent compared to existing conditions for the 2- and 10-year frequency storm events and must not exceed existing peak runoff rates and volumes for the 50- and 100-year frequency storm events. Drainage calculations must include existing and proposed runoff rates and volumes for the 2-, 10-, 50-, and 100-year frequency storm events using the rainfall data provided in §147-14C(1) above to all site design points with a narrative summary and summary table and be stamped and signed by a Registered Professional Engineer;

c. loss of recharge to the groundwater shall be minimized by infiltration measures, including, but not limited to environmentally sensitive site design, low impact development techniques, stormwater best management practices, and good operations and maintenance. This standard shall be met when the stormwater management system is designed to infiltrate the required recharge volume based upon soil type in accordance the Massachusetts Stormwater Handbook. There shall be pretreatment of stormwater runoff from any impervious surface other than a non-metal roof prior to infiltration. Documentation from soil test pit(s) excavated in the area of any proposed infiltration system shall be included in the filing to demonstrate a minimum of two feet of separation from the bottom of the proposed system and seasonal high groundwater, and to confirm the soil type used in the infiltration calculations. In the case where two feet of separation cannot be achieved or when the soils do not support infiltration, other stormwater management options including low impact development techniques shall be considered;

d. site and stormwater management design shall consider the presence of critical areas. Critical areas are recharge areas for public water supplies as defined at 310 CMR 22.02 (i.e., Zone I, Zone II, and Interim Wellhead Protection Areas for groundwater sources and Zone A for surface water sources), Outstanding Resource Waters and Special Resource Waters as designated at 314 CMR 4.06, bathing beaches as defined at 105 CMR 445.000, and cold-water fisheries as defined at 314 CMR 9.02 and 310 CMR 10.04. A discharge within the Zone II of a public water supply or within or near any other critical area requires the use of specific source control and pollution prevention measures and the use of specific structural stormwater best management practices identified for such areas in the Massachusetts Stormwater Handbook. A discharge is near a critical area if there is a strong likelihood of a significant impact occurring to said area, considering site-specific factors. Stormwater discharges to critical areas shall be removed from or set back from receiving waters or wetlands and shall receive the highest and best practical method of treatment commensurate with the scope of the proposed project. There shall be no stormwater discharges to the Zone I of a public water supply well unless essential to the operation of the public water supply;

e. a construction period erosion and sedimentation control plan commensurate in scope with the proposed project and its potential to affect Resource Areas shall be provided for review and implemented during construction; and

f. an operations and maintenance plan commensurate in scope with the proposed project shall be provided for review and implemented post-construction which identifies the responsible party and provides the inspection and maintenance requirements for all proposed stormwater system components.

## **ARTICLE V**

### **Public Hearings**

#### **§147-15 Public Hearing**

- A. The Applicant will be required to pay a local newspaper of general circulation for the current cost of advertising the hearing. The Applicant will be billed directly from the local newspaper for the cost of the advertised hearing.

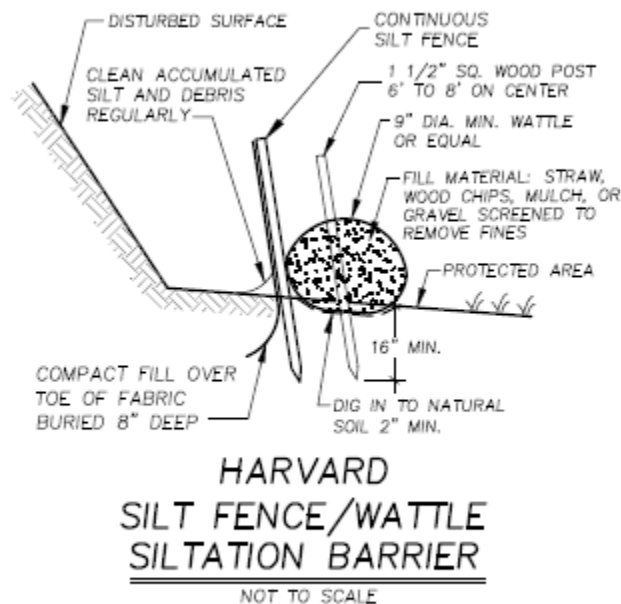
- B. The Commission shall hold a public hearing within twenty-one (21) days of the receipt of an application. Prior to making the decision, the Commission may require the submittal of additional data deemed pertinent to that decision. The Commission's decision shall be issued on the appropriate WPA form . At any time after an application is filed, Commission members may enter onto the land in the performance of their official duties.
- C. If the Commission determines that snow cover, ice or other weather conditions prevent the verification of the wetland line the Commission shall continue the hearing to a date certain when the determination can be made. In the case that the Applicant objects to a continuance or delay, the hearing shall be closed, and the Commission shall act on the information available.

## **ARTICLE VI Wetland Permits**

### **§147-16 Conveyance of Requirements**

- A. The Commission, shall convey all site-specific Pre-construction requirements within the Order of Conditions or the Determination of Applicability. The following general pre-construction requirements apply to all Orders of Conditions unless specifically waived by the Commission:

(1) Before any clearing, grading, filling, or any other construction activity, a continuous Siltation barrier shall be built according to plans and as presented during the hearing, to control potential surface water flow and intercept sediment from the work area. The preferred Siltation barrier is built according to the following diagram:



(2) Once the Siltation barrier is in place, the Agent to the Harvard Conservation Commission should be called (978-456-4100 Extension 321) for inspection and approval to proceed. Please allow five (5) working days for scheduling an inspection. No other work may be undertaken until this approval is complete. The inspection will also include other pre-construction conditions as noted in the Order of Conditions, such as the posting of the DEP file number.

(3) Following siltation barrier approval, no storage of materials, tree or brush cuttings, or any construction activity may take place outside, on the wetlands side, of the diked area. The siltation barrier is considered the " limit of disturbance and activity " and absolutely no activity shall take place in that area without the express approval of the Commission.

(4) As soon as possible, but in no event later than twenty-four (24) hours after each rain storm the siltation barrier shall be inspected and replaced or repaired as needed. Any material accumulated behind the barrier shall be removed promptly and placed appropriately in the work area, not in the wetland or buffer zone; or trucked off site and deposited in an approved upland fill site. Any accidental damage to the siltation barrier must be repaired within one (1) day and no work may proceed on the site until damage to the barrier is corrected. No work will take place during or immediately after rain storms.

#### **§147-17 Imposition of Conditions**

As part of a permit issued pursuant to this Bylaw, the Commission shall impose such conditions as are necessary to protect the value of the wetlands, related water resources and adjoining land areas under its jurisdiction.

#### **§147-18 Imposition of Time Limits**

The Commission may require as a condition of a permit, that certain work shall be performed within specific periods of time.

#### **§147-19 Order of Conditions**

Permits issued pursuant to the Bylaw and these regulations may be combined and released within an Order of Conditions which may be issued pursuant to M.G.L. Chapter 131 §40, as amended.

#### **§147-20 Denial of Permit**

If the Commission deems that the interests stated in the Bylaw are not adequately protected under the terms of the petitioner's proposal, the Commission may refuse to issue a permit. When the Commission votes to deny a permit, it shall issue a written decision.

#### **§147-21 Submissions of Copies**

The Applicant may be required to send copies of permits and decisions issued pursuant to the Bylaw to the Select Board, Planning Board, Driveway Inspector, Fire Department, Bare Hill Pond Watershed Management Committee, Board of Health, or Building Commissioner.

#### **147-22 Extension of Permit**

The Commission may issue an Extension Permit for a period of one (1) year, up to three (3) years, provided that a written request for an extension is filed at least thirty (30) days prior to the expiration date of the permit.

## **§147-23 Revocation or Amendment**

The Commission may revoke or amend a permit issued under the Bylaw if any of the following circumstances occur:

### **A. Revocation**

- (1) The petitioner and/or his successors fail(s) to comply with the terms of the permit.
- (2) The petitioner and/or his successors fail(s) to comply with the terms of other Town Permits which have been issued for the project and the issuing authority has requested in writing that the Commission revoke the wetlands permit.

### **B. Amendment**

- (1) Relatively minor changes which result in the same or decreased impact on the interests protected by the Act and the Bylaw may be effectuated through an Amendment to the Order of Conditions.
- (2) If the Commission determines that the project purpose or scope has changed substantially or that the interests specified in the Wetlands Protection Act and/or the Harvard Bylaw are not protected, then no Amendment shall be issued and the Applicant will be required to file a new Notice of Intent.
- (3) A request to amend an Order of Conditions shall be submitted to the Commission in writing at least seven (7) days prior to the meeting of the Commission at which it is to be initially considered. The request shall include a narrative description of the proposed change(s) along with a site plan showing the original design along with the proposed change(s). A copy of the written narrative and the modified plan should, at the same time, be submitted to the DEP regional office.
- (4) If the Commission determines that a new Notice of Intent is not necessary, the Commission shall publish in a local newspaper, at the Applicant's expense, notice in the same form as utilized for Notices of Intent, to inform the public that an amendment to the Order of Conditions will be considered at a public hearing. In addition, the Applicant must follow the same requirements of abutter notification as if a Notice of Intent were filed.
- (5) Under no circumstances will the issuance of an Amended Order of Conditions extend the effective date of the original Final Order of Conditions. The Amended Order shall run with the term of the original Order of Conditions or the effective date of an extended Order of Conditions.

## **ARTICLE VII Vernal Pools**

### **§147-24 Presumptions of a vernal pool**

The term "vernal pool" is defined in Chapter 119-9 of the code of the Town of Harvard. It is not necessary for a pool to be certified by the Massachusetts Natural Heritage and Endangered Species program to enjoy protection. It shall be the Applicant's responsibility to indicate the location of possible vernal pools and vernal pool habitat on the subject property.

### **§147-25 Overcoming the presumption**

For the purposes of overcoming the presumption of a vernal pool habitat the Commission will consider:

- A. Evidence that the ponding area does not hold water for at least two (2) continuous months when not in a period of extended drought.
- B. Evidence that vernal pool species do not breed or have not bred in the ponding area.
- C. Evidence that the ponding area could not be a viable breeding site for vernal pool species due to incompatible physical, chemical, biological, or other persistent conditions at the site in most years.

### **§147-26 Challenges to the presumption**

Many of the indicators of vernal pool habitat are seasonal. For example, certain salamander egg clusters are only found between late March and late May. Wood frog chorusing only occurs between late March and May. Consequently, failure to find evidence of breeding must be tied explicitly to those periods during which the evidence is most likely to be available. Accordingly, in the case of challenges to the presumption of vernal pool habitat, the Conservation Commission may require that the determination be postponed until the appropriate time period consistent with the evidence being presented. The Commission may also require its own site visits as necessary to confirm the evidence plus the use of consultants as needed.

## **ARTICLE VIII Wetland Replication**

### **§147-27 History**

The history of wetland replication is mixed. Scientific reviews conclude that for the most part replications fail to reproduce the range of values – in quantity and quality – of the wetlands they are intended to replace, in particular, difficulties in replicating proper hydrological conditions in a consistent and enduring fashion seem to be a major source of the problem.

### **§147-28 Conditions for Replication**

The Commission shall strongly discourage any plan that requires wetland replication.

In those rare instances where replication is approved by the Commission the following conditions must be met:

- A. The replicated wetland must be constructed in full and conditionally approved prior to construction of any structures. At a minimum the replicated wetland must reproduce all the values and functions of the original wetland as determined by the Commission. The Commission may require that additional values and functions be incorporated into the replication design.
- B. In circumstances where replacement of specific functions and values would require substantial amounts of time before being completely replicated (for example, those provided by large mature trees) the Commission may require additional compensation of area, functions, values, etc. beyond those required in other sections of the Bylaw and its regulations.
- C. In most cases the minimum area of replication must be at least 1.5 times as large as the area of the original resource that will be destroyed. The actual area ratio of replacement shall be decided on a case-by-case basis in accordance with §147-28 A and B, above.

- D. A qualified wetland scientist, employed by the Applicant shall be required by the Commission during the construction of the wetland replication area. The credentials of the wetland scientist shall be submitted to the Commission for approval prior to the start of construction.
- E. Siltation barriers shall be placed around the proposed wetland replication area prior to start of construction
- F. Prior to the start of wetland construction detailed measurements of the depth of the soil O and A horizons within the wetland to be lost during construction shall be conducted. The project shall use this information to determine the suitability of these horizons for reuse in the replication area and to calculate the need for additional soil materials. The top twelve inches (12”) of soil from the original wetland must be transplanted with soil structure- especially lamination and density profile- intact to the replication area. This is intended to preserve plant, invertebrate and planktonic communities of the wetland and inhibit the blossoming of invasive species.
- G. Soil materials to be reused (from the wetland to be lost during construction) shall be removed and placed in the prepared replication area within one (1) day. If this is not possible, these soils shall be stockpiled for the minimum amount of time feasible and kept loosely covered and moist at all times. Each day any soils are stockpiled the project manager shall notify the Commission in writing of the stockpiling, the volume of soils stockpiled, the reason therefore, and the expected duration of the stockpiling. The notification shall contain a certification signed by the wetland scientist that s/he has inspected the stockpile that day and that it is loosely covered and moist.
- H. The proposed replication area shall be excavated to a depth of one (1) foot below the proposed final grade, as specified in the specification and plans submitted as part of the Application and referred to in the Order of Conditions (OOC). The subsoil within the replication area shall be examined by the wetland scientist to determine whether it is fine textured (fine sandy loam or finer, as defined by NRCS standards). If the subsoil is course textured, it shall be replaced with fine textured material to allow for the development of a capillary fringe between the groundwater and the soil surface.
- I. Following placement of topsoil a minimum of forty-eight (48) hours shall pass prior to planting of wetland vegetation to allow for rebound of buried or compacted peat. The final grade shall be adjusted as necessary.
- J. The wetland scientist shall visit the replication area weekly following planting and seeding for the duration of the first growing season to determine the need for irrigation and additional fertilization and to inform the site contractor of these requirements.
- K. Erosion control structures shall be removed upon stabilization of the replication area to allow free circulation of water between the wetland replication area and the adjacent natural wetland
- L. The wetland scientist shall inspect the wetland replication area twice (2) each year during late spring and during the mid to late summer of the first two (2) full growing seasons. A written report shall be submitted to the Commission at the end of each growing season
- M. A bond shall be posted that will enable the Commission to complete the replication should the Applicant fail to fulfill obligations set forth in the Order of Conditions. The amount of the bond shall be determined by the Commission (See Article XI, below).

## **ARTICLE IX**

### **Appeal**

#### **§147-29 Appeal of Permit**

Any person aggrieved by the decision of the Conservation Commission, whether previously a party to the preceding, may appeal according to the Massachusetts General Laws.



### **§147-30 Appeal Timeframe**

The appeal shall be made within ten (10) days of the signing and/or issuance of said decision, whichever is the later. Notice of the appeal and a copy of the complaint shall be sent by Certified Mail, or hand delivered, to the Commission, its authorized representative or assigns, and the Town Counsel to be received within the ten (10) day appeal period.

### **§147-31 Appeals Content**

- A. The appeal shall contain any facts pertinent to the issue, a copy of the decision being appealed bearing the date of filing thereof, the complete name and address of the attorney, if any, representing the person filing the appeal, and the relief being sought.
- B. If the complaint is filed by some person or persons other than the original Applicant, appellant or petitioner, such original applicant, appellant, and all members of the Conservation Commission shall be named as parties' defendant.

## **ARTICLE X Final release**

### **§147-39 Request for a Certificate of Compliance**

Upon completion of the project, the applicant shall request in writing from the Commission, a Certificate of Compliance, WPA Form 8A. This request shall be accompanied by an "as built" plan and an engineer's certification of the project's compliance with the permit.

### **§147-40 Decision on Certificate of Compliance**

If, after site inspection, the Commission determines that the requirements of the permit have not been satisfactorily met, the request for a final release may be denied. The decision along with the reasons for denial, shall be forwarded to the applicant within twenty-one (21) days of the receipt of the request.

### **§147-41 Permanent Conditions**

The Commission may specify in the Certificate of Compliance, that certain conditions of the permit, such as maintenance of waterways and erosion control, are imposed permanently and do not expire with the issuance of the Certificate of Compliance.

### **§147-42 Recording of Certificate of Compliance**

The person to whom the Certificate of Compliance is issued shall forthwith record the Certificate of Compliance in the Registry of Deeds in the chain of title of the affected property and shall notify the Conservation Commission, in writing, that said recording has occurred.

## **ARTICLE XI**

### **Security and Enforcement**

#### **§147-43 Guaranty of performance and observance of conditions**

- A. As part of a permit issued under this Bylaw, in addition to any security required by any other Town or State board, agency or official, the Commission may require that the performance and observance of the conditions imposed hereunder may be secured wholly or in part by one or more of the methods described below:
- (1) By proper bond or deposit of money or negotiable securities sufficient in the opinion of the Commission.
  - (2) By a conservation restriction, easement, or other covenant remaining with the land and enforceable in the court of law, executed and duly recorded by the owner of record, to the Town and members of the public, whereby permit conditions shall be performed and observed before any lot may be conveyed other than by mortgage deed. Upon completion of site alterations required in the permit, security for the performance of which was given by bond, deposit, or covenant, or upon the complete performance of the covenants with respect to the site, the Applicant may request and agree to terms of release which the Commission shall determine. If the Commission determines that said alterations have been completed in compliance with the conditions of the permit, it shall release the interest of the Town in such bond and return the bond or deposit to the person who furnished same, or release the covenant, if appropriate.
- B. If the Commission determines that said alterations have not been completed in compliance with the permit, it shall, within forty-five (45) days specify to the Applicant, in writing, the details wherein said alterations fail to comply with the permit.

#### **§147-44 Enforcement**

- A. The Commission may issue an Enforcement Order or an Order to Cease and Desist if at any time it becomes aware of any alteration of or work within a resource area protected by the Bylaw that is not pursuant to a valid Order of Conditions. Any member of the Commission or its Agent may issue an Enforcement Order or an Order to Cease and Desist upon good cause shown.
- B. A public hearing shall be held on the Enforcement Order or Order to Cease and Desist at the next regularly scheduled meeting of the Commission or as soon as practicable if a hearing at the next regularly scheduled meeting is not feasible.
- C. If alteration to the resource area has commenced, the Commission may, as part of the Enforcement Order and/or Order to Cease and Desist, require the landowner and/or person responsible for the alteration to restore the resource area; to replicate the altered resource area; or any other action deemed necessary by the Commission to protect the interests of the Bylaw.

**ARTICLE XII**  
**Availability of Regulations**

**§147-45 Copies available for purchase**

Copies of Chapter 147 Wetlands Protection Bylaw Rules shall be made available for purchase from the Harvard Conservation Commission, 13 Ayer Road, Harvard, MA 01451, for the price of \$6.00 in the form of cash or a check made out to the Town of Harvard or on the Town website at: [www.harvard.ma.us](http://www.harvard.ma.us).

**ARTICLE XII**  
**Amendments**

**§147-44 Public Hearing & Vote**

These rules and regulations may be amended from time to time by a majority vote of the Conservation Commission. Prior to taking a vote on an amendment, the Conservation Commission shall have a public hearing on the proposed change(s).

FORM A  
NOTICE OF FILING

DATE: \_\_\_\_\_ RE: Property located at \_\_\_\_\_

FROM: \_\_\_\_\_  
(applicant)

Address \_\_\_\_\_

Telephone \_\_\_\_\_

A. Pursuant to the requirements of M.G.L. Chapter 131 §. 40 and /or the Harvard Wetlands Bylaw I am submitting herewith a complete copy of a Request for Determination of Applicability or an Application for a Harvard Wetland Permit. Copies of this complete application have been submitted as required under subsection 147-14 Notice to Town Boards by certified mail or hand delivery as follows:

	Date of Submittal
Conservation Commission (10 copies)	_____
Department of Environmental Protection (2 copies)	_____
_____	_____
_____	_____
_____	_____
(add boards as specified at time of filing)	_____

B. Have the abutters to the property on which the work is proposed, been notified about the filing of this application, on Form B? \_\_\_\_\_ (attach a certified list of abutters).

C. If the owner of the land is other than the Applicant, the owner must either sign this application in the space provided or provide written authorization for the Applicant to apply.

Owner's Signature \_\_\_\_\_ Date: \_\_\_\_\_

D. Please check the appropriate box(s):

- ☐ Request for Determination of Applicability
- ☐ Notice of Intent
- ☐ Abbreviated Notice of Intent
- ☐ Abbreviated Notice of Resource Area Delineation
- ☐ Amendment of the Order of Conditions

E. Have the appropriate Town filing fees been included? \_\_\_\_\_

FORM B  
NOTIFICATION TO ABUTTERS  
MASSACHUSETTS WETLAND PROTECTION ACT  
AND HARVARD WETLANDS PROTECTION BYLAW

DATE: \_\_\_\_\_

Certified Mail # \_\_\_\_\_  
or Date of Hand Delivery \_\_\_\_\_

TO: \_\_\_\_\_  
(abutter) (address)

FROM: \_\_\_\_\_  
(applicant) (address) (Telephone No.)

RE: Property identified on Harvard Assessors Map # \_\_\_\_\_ Parcel \_\_\_\_\_  
The address of the lot where the activity is proposed is:  
\_\_\_\_\_.

Pursuant to the requirements of the Harvard Wetlands Protection Bylaw and the second paragraph of Massachusetts General Laws Chapter 131 §40, you are hereby notified that the following forms have been filed with the Harvard Conservation Commission:

\_\_\_\_\_ A Notice of Intent or Abbreviated Notice of Intent seeking permission to conduct one or more of the following, remove, fill, dredge, or alter an Area Subject to Protection Under the Wetlands Protection Act (General Laws Chapter 131, §40) and the Harvard Wetlands Protection Bylaw (Chapter 119 of the Code of the Town of Harvard).

\_\_\_\_\_ An Abbreviated Notice of Resource Area Delineation for confirmation of the delineation of a Bordering Vegetated Wetland (BVW) for projects in the buffer zone under the Wetlands Protection Act (General Law Chapter 131, § 40) and the Harvard Wetlands Protection Bylaw (Chapter 119 of the Code of the Town of Harvard).

\_\_\_\_\_ A Request for Determination of Applicability of the Harvard Wetlands Protection Bylaw (Chapter 119 of the Code of the Town of Harvard) and the State Wetlands Protection Act (General Laws Chapter 131, §40)

\_\_\_\_\_ Amendment to the Order of Conditions under the Harvard Wetland Bylaw (Chapter 119 of the Code of the Town of Harvard)

The Harvard Wetlands Protection Bylaw defines abutters as those persons whose property is within 300 feet of the boundary of the property or whose property lies across a traveled way or railroad bed from the property identified above. Notices shall be sent to the most recent owner of the property according to the most recent Assessors record. The list of abutters shall be certified by the Board of Assessors.

The Harvard Conservation Commission will hold a public hearing on the filing within twenty-one (21) days upon receipt of the complete application. Notice of this public hearing will be given at least five (5) days prior to the hearing, in a local newspaper, as well as appear on the Town of Harvard website at [www.harvard.ma.us](http://www.harvard.ma.us).

Plans for this project and a copy of the application are on file with the Land Use Board Office. Copies may be obtained from the Applicant's Representative by calling the following telephone number \_\_\_\_ - \_\_\_\_ - \_\_\_\_ between the hours of \_\_\_\_ and \_\_\_\_ on the following days of the week \_\_\_\_\_.

The hearing can be subsequently continued to a later date by the Commission with the agreement of the Applicant.

To contact the Central Region DEP office call 508-792-7650

FORM C

REQUEST FOR WAIVER

HARVARD WETLANDS PROTECTION BYLAW

Date:

To: Harvard Conservation Commission

From: \_\_\_\_\_  
(name of petitioner)

\_\_\_\_\_  
(address of petitioner)

RE: Harvard Wetlands Rules and Regulations

Request for Waiver

Pursuant to the provisions of §147-3 of the Regulations for the administration of The Harvard Wetlands Protection Bylaw, I hereby request a waiver from the Commission for compliance with the following section of the regulations:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The waiver is requested for the following reason(s):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature of petitioner \_\_\_\_\_ Telephone # \_\_\_\_ - \_\_\_\_ - \_\_\_\_

FORM D  
PERMISSION FOR ACCESS

TO: Harvard Conservation Commission  
13 Ayer Road  
Harvard, MA 01451

From: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Pursuant to §147-6.D. or §147-11.D. of the Wetlands Protection Bylaw Rules I do hereby grant the Harvard Conservation Commission and/or its consultants access to the project site under consideration for a Determination of Applicability, Notice of Intent, Abbreviated Notice of Intent, Abbreviated Notice of a Resource Area Delineation or an Amendment to the Order of Conditions any time from the receipt of such notice through the issuance of a Certificate of Compliance, Negative Determination, expiration of a Positive Determination and/or an Order of Resource Area Delineation.

Signed: \_\_\_\_\_ Date \_\_\_\_\_  
*Owner or Authorized Applicant from Form A part C*

FORM E

PERMISSION TO BILL APPLICANT DIRECTLY FOR LEGAL NOTICE

TO: Harvard Conservation Commission  
13 Ayer Road  
Harvard, MA 01451

FROM: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I hereby authorize Harvard Press to bill me directly for the legal notice published for a public hearing with the Harvard Conservation Commission.

Signed: \_\_\_\_\_  
*Owner or Authorized Applicant from Form A part C*



# FORM F

Wetland filing fees calculation worksheet for work in resource areas

	Fee	Total
<b><u>Notice of Intent Fees</u></b>		
1) <i>Single family</i>		
Septic Repair or Upgrade (Enter Fee & Skip to Total Fee)	\$200.00	_____
New Construction or alteration involving 500sf or less of total construction	\$300.00	_____
New Construction or alteration involving 501sf to 1499sf of total construction	\$600.00	_____
New Construction or alteration involving 1500 sf or more of total construction	\$900.00	_____
2) <i>Subdivision/mini Subdivision</i>		
Roads and Utilities only	\$1,500.00	_____
Multifamily/Condominium Structures construction	\$1,500.00	_____
3) <i>Commercial or Industrial Projects</i>	\$1,500.00	_____

## **Additional charges under a Notice of Intent for disturbance within the buffer zone**

1) Disturbance within the buffer zone	_____sf	x 0.25 =	_____
2) Confirmation delineated wetland line	_____linear ft	x 0.50 =	_____
3) Alteration or replication of wetlands	_____sf	x 1.00 =	_____

## **TOTAL FILING FEE**

\_\_\_\_\_

**Fee doubled if Notice of Intent is filed after work began or an Enforcement Order was issued**

\_\_\_\_\_

## **Other fees**

Request for an amendment to an Order of Conditions	\$200.00	_____
Request for an extension to an Order of Conditions	\$125.00	_____
Request for a reissued Certificate of Compliance	\$100.00	_____
Request for an Emergency Certificate of Compliance	\$200.00	_____
Request for an Emergency Certification Form	\$200.00	_____
Request for Certificate of Compliance with Expired OOC or Partial Certificate of Compliance	\$125.00	_____
Request for Determination of Applicability (RDA)	\$100.00	_____
Abbreviated Notice of Resource Area Delineation (ANRAD) (Minimum \$100.00, Maximum \$1,500.00)	_____linear ft	x \$1.50= _____

Note: These fees are in addition to recording and advertising fees, and to the State Wetlands Program Fees charged under MGL. Ch. 131 Sec.40 and 310 CMR 4.10(8)(n).

## **TOTAL FEE PAYABLE TO THE TOWN OF HARVARD**

\_\_\_\_\_